

REMARKS

Claims 1-27 are pending in the present application. The amendment to claim 1 is supported by the present application at pages 10 and 16. Claims 20 and 21 are cancelled herein. Claims 3, 23-24 are amended as a result of the amendment to claim 1. Entry of the foregoing amendments is respectfully requested.

Non-Statutory Obviousness-Type Double Patenting Rejection

At page 3 of the Office Action, the Examiner maintained the rejection of claims 1 and 2 on the ground of non-statutory obviousness-type double patenting over claims 44 and 45 of copending application Serial No. 10/824,688 for the reasons set out in the Office Action mailed March 6, 2006.

Applicants again request that the rejection be held until such time as a notice of patentable subject matter has been received in the applications. An appropriate terminal disclaimer may be filed at that time, if necessary.

Rejections under 35 USC § 103

At pages 4-5 of the Office Action, the Examiner maintained the rejection of claims 1-17, 20, 21, and 23-27 under 35 USC § 103(a) as obvious over Gennadios (U.S. Patent 6,214,376) for the reasons set out in the Office Action mailed March 6, 2006. Claims 18, 19 and 22 were separately rejected under 35 USC § 103(a) as obvious over Gennadios (U.S. Patent 6,214,376) for the reasons set out in the Office Action mailed March 6, 2006.

Applicants respectfully submit that the Examiner has not set forth a proper *prima facie* case of obviousness for reasons of record and such comments are incorporated herein by reference for purposes of brevity. Reconsideration and withdrawal of the foregoing rejections is respectfully submitted.

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The Examiner's remarks in support of the rejections appear to be the same as the remarks provided in previous Office Actions, except for comments made in regard to a reference recently submitted by Applicants (in support of Applicants' position) in an IDS. Essentially, the Examiner's position is based entirely on the technical assertion that all carrageenans have "a close structural relationship" and "a specific significant property in common."

It is on these technical assertions that Applicants disagree and again explain that the references relied upon by the Examiner do NOT suggest the delivery systems of the present claims comprising kappa-2 carrageenan.

Applicants have explained, and provided numerous references in support, that kappa-2 carrageenans have different structures than iota carrageenans and kappa carrageenans and, based upon such structural differences and their known property differences (e.g., their known weak gelling properties), a skilled person would not have expected that kappa-2 carrageenan could be used in delivery system gel film applications.

As explained in the present application and consistent with the references supplied by Applicants, iota and kappa carrageenan are known gelling carrageenans, while kappa-2 carrageenan was known to be weakly gelling (e.g., see the present application at page 7, as well as the reference discussed in greater detail below). Because kappa-2 carrageenan was known to be weakly gelling, one skilled in the field would not have expected kappa-2 carrageenans to form gel films and delivery systems having the required strength.

The Examiner appears to admit that the kappa-2 carrageenans were known to be weakly gelling; however, the Examiner appears to adhere to the rejections "since the soft gel property of the kappa-2 carrageenan is still a gelling property which is a significant property in common with kappa and iota carrageenans (see the Office Action at page 5).

Applicants again explain that one skilled in the field would not have considered kappa-2 carrageenan to have a soft gel property (known to be weakly gelling) in common with kappa and iota carrageenans (both known to be gelling carrageenans). In order to further emphasize this distinction and the unexpected functionality of the claimed kappa-2 carrageenan in delivery

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system applications, Applicants have herein amended the claims to recite a break force of at least 1,000 grams. Applicants respectfully submit the Examiner has failed to provide any reference suggesting that the presently claimed delivery systems comprising kappa-2 carrageenans would have a break force strength of at least 1,000 grams.

The Examiner appears to support the foregoing rejections based upon the following reference recently cited by Applicants in an IDS: Marine Colloids Application Bulletin, G-39, 1990 (“Technical Bulletin”). The Examiner argues that this reference further supports the rejection on the basis that it confirms that kappa-2 carrageenan has “properties intermediate between kappa and iota carrageenans.”

This is an incorrect reading of the reference.

That is, Applicants explain that rather than support the rejection as suggested by the Examiner, the reference actually supports the non-obviousness of the present claims. Applicants previously submitted this Technical Bulletin in support of the present claims. This Technical Bulletin discusses the water gelling properties of various carrageenans. In particular, this Technical Bulletin states the following:

“In order to consider a carrageenan for use in an aqueous gelling application, the prospective user should be familiar with the basic types of carrageenan that are available, their properties and how to use them in the system...The two basic water gelling carrageenans are kappa and iota...The kappa-2 carrageenan has properties intermediate between kappa and iota, however, it produces rather soft gels, therefore it is not often used by itself for preparation of water gels.”

See pages 2 and 6 of the Technical Bulletin (emphasis added).

This Technical Bulletin does NOT list kappa-2 carrageenan as a known water gelling carrageenan and, further, states that because it is known to produce rather soft gels, “it is not

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often used by itself for preparation of water gels.” This teaching is entirely consistent with the other references already submitted by the Applicants on this point.

The Examiner’s position appears to dismiss these clear teachings in the reference on the basis that the reference also discloses that kappa-2 carrageenan has “properties intermediate between kappa and iota carrageenans.” However, Applicants point out that the authors were clearly distinguishing the gelling properties of kappa-2 carrageenan from kappa and iota carrageenan and not arguing that kappa-2 carrageenan had a gelling property that is intermediate between kappa and iota carrageenan. Again, the Technical Bulletin states:

The kappa-2 carrageenan has properties intermediate between kappa and iota, however, it produces rather soft gels, therefore it is not often used by itself for preparation of water gels.”

See page 6 of the Technical Bulletin (emphasis added).

Applicants respectfully submit that the prior art would not have suggested to one skilled in the art that kappa-2 carrageenan, known to be weakly gelling, could be used in delivery system applications to achieve a gel film having a break force strength of at least 1,000 grams, and the Examiner has not cited any reference to demonstrate otherwise.

In view of the amendment to claim 1, the references cited by the Applicants (demonstrating that kappa-2 carrageenan was known to be weakly gelling) and the lack of any reference material cited by the Examiner to support the position that kappa-2 carrageenan could be used in delivery systems to achieve a gel film having a break force strength of at least 1,000 grams, Applicants respectfully submit that the presently claimed invention is unobvious and patentable over the prior art. Accordingly, withdrawal of the rejections is respectfully requested.

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Early, favorable action is earnestly solicited.

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Respectfully submitted,

By /Paul A. Fair, Reg. No. 35,866/
Paul A. Fair, Esq.
Registration No.: 35,866
(o) 215-299-6723

Address all correspondence to:

Patent Administrator
FMC Corporation
1735 Market St
Philadelphia, PA 19103